

Accommodation Tasks Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
AC01	Inspect berthing accommodations.	X				X							X	X		
AC02	Inspect berthing accommodations on a SPV.							X							X	
AC03	Inspect berthing accommodations for compliance with ILO 147.		X		X						X					X
AC04	Inspect mess deck spaces.	X				X							X	X		
AC05	Inspect hospital spaces.					X							X			
AC06	Inspect areas where washers and dryers are installed.	X				X							X	X		
AC07	Inspect paint lockers.	X				X				X			X	X		
AC08	Inspect ladders, railways, and gangways.	X				X				X			X	X		
AC09	Inspect ladders, railways, and gangways on a SPV.							X							X	
AC10	Inspect heating and cooking equipment.	X				X		X					X	X		
AC11	Inspect heating and cooking equipment on a SPV.														X	

Accommodation Tasks

<u>Task Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
AC01	Inspect berthing accommodations. <ul style="list-style-type: none"> • Spaces provided of size required by regulations • Appropriate number of berths provided • Proper seating available for PAX's on vessels whose voyages are limited by certificate of inspection to set time periods • Lockers of proper size provided for each berth • Screens provided for ventilation ports on non-air conditioned vessels • Mechanical ventilation/air-conditioning systems operating properly • Adequate number of toilets and washrooms provided for number of persons in crew specified on certificate of inspection, kept in good repair and in a sanitary condition • Lights provided for each berth • Hot water heating piping within the space properly lagged • Electrical hazards • Two means of escape provided from each berthing space and other areas where personnel would normally be employed 	_____	_____
AC02	Inspect berthing accommodations on a small passenger vessel. <ul style="list-style-type: none"> • Space for passengers • Toilet facilities • Bunk arrangements • Means of escape • Separation from machinery and fuel tank spaces • Ventilation 	_____	_____
AC03	Inspect berthing accommodations for compliance with ILO 147. <ul style="list-style-type: none"> • Protection against weather and sea • Minimal steam supply and exhaust piping • Sufficient drainage • Adequate ventilation • Heating system • Adequate lighting • Sleeping quarters located above the load line • Required floor area per person • No direct openings to cargo, machinery, galley, or storeroom • Clear headroom • Number of persons per room meets requirements • Each crew member has own berth • Berths arranged, constructed, and sized properly • Rooms outfitted with table or desk, mirror, small cabinet, book rack, coat hooks, and locker 	_____	_____

Accommodation Tasks

<u>Task Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
AC04	Inspect mess deck spaces. <ul style="list-style-type: none"> • Reasonable sanitation standards are evident • No excessive grease buildup has accumulated in the grill area and in the grill vent • Chill boxes are operable and reasonably clean • Escape latches or alarm systems on the chill boxes are functioning properly 	_____	_____
AC05	Inspect hospital spaces. <ul style="list-style-type: none"> • Hospital space adequate in size to accommodate the portion of crew required by regulation • Required equipment is available for use (stretcher, blankets, etc.) • Space has head, washing and bathing facilities • Space provided as hospital/treatment room is dedicated to that purpose; no PAX's or other persons in the crew are berthed there 	_____	_____
AC06	Inspect areas where washers and dryers are installed. <ul style="list-style-type: none"> • Dryer unit is properly vented and no fire hazard due to lint buildup exists • "Jury-rigged wiring" systems for units are employed • Units securely mounted 	_____	_____
AC07	Inspect paint lockers. <ul style="list-style-type: none"> • Required fire protection equipment provided in accordance with applicable regulations and vessel's approved fire safety plan • Space(s) designated constructed of or wholly lined with metal • Space(s) well vented and means provided to secure ventilation if necessary 	_____	_____
AC08	Inspect ladders, rails and gangways. <ul style="list-style-type: none"> • An approved pilot ladder provided and maintained in good repair • Accommodation ladder of sufficient size provided to be used when distance from sea level to vessel's deck is more than 30 feet • "Rails" are provided on accommodation ladders, when used 	_____	_____
AC09	Inspect ladders, rails and gangways on a small passenger vessel. <ul style="list-style-type: none"> • Efficient" rails provided on decks and bridges of proper height and configuration • Storm rails provided where persons would have normal 	_____	_____

Accommodation Tasks

Task
Number

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Task

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Completed

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Officer's
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Accommodation Tasks

<u>Task Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
AC10	Inspect heating and cooking equipment. <ul style="list-style-type: none"> • Thermal cutouts for electric space heaters • Grab rails for electric ranges • LPG/CNG installed in accordance with regulations 	_____	_____
AC11	Inspect heating and cooking equipment on a small passenger vessel.	_____	_____

Cargo System Tasks Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
CS01	Verify cargo aboard is transported in approved cargo systems.					X								X		
CS02	Inspect bulk liquid cargo system.	X					X									
CS03	Inspect bulk liquid cargo system on an OSV or MODU.												X	X		
CS04	Inspect components installed in designated hazardous locations.	X				X				X			X			
CS05	Inspect dry bulk cargo system.					X										
CS06	Inspect break bulk cargo system.					X										
CS07	Inspect container systems.					X										
CS08	Inspect cargo pumproom(s).	X					X			X						
CS09	Test and inspect the emergency shutdown station(s).	X				X										
CS10	Inspect cargo tank vents.	X					X									
CS11	Inspect closed gauging systems.	X					X									
CS12	Ensure vessel's IGS/COW operations/equipment manual was reviewed.						X			X						
CS13	Examine foreign flag vessel's IGS/COW operation/equipment manual.										X					X
CS14	Inspect the COW equipment.						X			X						
CS15	Inspect the vessel's letter of acceptance for installed IGS/COW system.						X			X						
CS16	Inspect the vessel's IGS/COW operations/equipment manual entries.						X			X						
CS17	Examine IGS equipment and verify that it is properly installed.						X			X						
CS18	Witness IGS operational test of safety shutdowns and controls.						X			X						
CS19	Witness IGS operational test of visual and/or audible alarms.						X			X						
CS20	Witness operational test of IG blower shutdown for various conditions.						X			X						
CS21	Ensure gauging system is installed for the cargoes listed on the SOE.						X									
CS22	Inspect the cargo pipe valves, pump manifolds, and piping.						X									
CS23	Check that the Cargo Information Cards are on board.										X					
CS24	Check that accurate & correctly posted cargo location plan is on board.										X					
CS25	Check that a cargo piping plan is on board.										X					

Cargo System Tasks Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
CS26	Inspect the cargo transfer hoses for condition and required markings.	X					X									
CS27	Check person in charge of transfer operations.										X					
CS28	Check that incompatible cargoes are properly separated.										X					
CS29	Check cargo tanks' spill valves.										X					

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS01	Verify cargo aboard is being transported in approved cargo systems.	_____	_____
CS02	Inspect bulk liquid cargo system. <ul style="list-style-type: none"> • Pumprooms and/or pumping equipment: <ul style="list-style-type: none"> – Lighting fixtures and all electrical equipment are explosion proof – No dead ended, loose or frayed cabling – No jury-rigged wiring, extension cords, etc. – Bulkheads gas tight – Ladders – Ventilation system complete and operating – Pumps and controls operational – No leaking seals – Mechanical and electrical remote operating devices attached and operational • Cargo piping: <ul style="list-style-type: none"> – Piping – Valves – Fittings – Gaskets – Supports – Materiel condition of all components – Expansion joints • Gauging and venting system: <ul style="list-style-type: none"> – Type of gauging (open, closed, restricted) – Gauging type approved for cargo carried – Gauging systems operational – High and low level alarms – Overfill controls – Condition of vent piping and vent masts – Vent outlets at proper height – Required valves installed and operational – Pressure relief valves tested and certified - no signs of tampering – Pressure vacuum valves and headers free of corrosion or dirt – Flame screens installed and acceptable • Vapor recovery system 	_____	_____

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS02 (cont'd.)	<ul style="list-style-type: none"> • Bulk liquid cargo heating system: <ul style="list-style-type: none"> – Indicate which tanks – Separate from hotel services for toxic cargoes – Contamination detection available for toxic cargo – System operational • Bulk liquid cargo inerting system • Operational procedures: <ul style="list-style-type: none"> – Aboard vessel – Procedures in compliance with applicable CFR parts – Transfer system adequately described – Shipping papers/manifest 		
CS03	<p>Inspect bulk liquid cargo system on an OSV or MODU.</p> <ul style="list-style-type: none"> • Pumprooms and/or pumping equipment: <ul style="list-style-type: none"> – Lighting fixtures and all electrical equipment are explosion proof – No dead ended, loose or frayed cabling – No jury-rigged wiring, extension cords, etc. – Ventilation system – Pumps and controls operational – No leaking seals – Mechanical and electrical remote operating devices attached and operational • Cargo piping: <ul style="list-style-type: none"> – Piping – Valves – Fittings – Gaskets – Supports – Materiel condition of all components – Expansion joints • Gauging and venting system: <ul style="list-style-type: none"> – Type of gauging (open, closed, restricted) – Gauging type approved for cargo carried – Gauging systems operational – High and low level alarms – Overfill controls – Condition of vent piping – Vent outlets at proper height – Required valves installed and operational – Pressure vacuum valves and headers free of corrosion or dirt – Flame screens installed and acceptable 	_____	_____

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS04	Inspect components installed in designated hazardous locations. <ul style="list-style-type: none"> • Cable runs inboard and clear of cargo tank openings • Electrical components used in cargo pumproom intrinsically safe • Storage batteries located in cargo handling areas • Lights in pump rooms use gas tight lenses or intrinsically safe units • Electrical components on the weather deck located within ten feet of cargo tank openings, tank vents or doors, explosion proof 	_____	_____
CS05	Inspect dry bulk cargo system.	_____	_____
CS06	Inspect break bulk cargo system. <ul style="list-style-type: none"> • Approved cargo gear plans aboard • Valid cargo gear certificates aboard • Cargo gear examined in absence of cargo gear certificate • Vessel loading manual available • Hatch covers • Condition of ladders • Electrical fixtures and wiring • Fire detection system in hatches • Fire safety and personnel hazards • Power-operated industrial trucks 	_____	_____
CS07	Inspect container systems. <ul style="list-style-type: none"> • Approved cargo gear plans aboard • Valid cargo gear certificates aboard • Cargo gear examined in absence of cargo gear certificate • Vessel loading manual available • Hatch covers • Condition of ladders • Electrical fixtures and wiring • Fire detection system in hatches • Fire safety and personnel hazards • Power-operated industrial trucks 	_____	_____

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS08	Inspect cargo pumproom(s). <ul style="list-style-type: none"> • Pumproom access doors open onto the weatherdeck • Ladders and accesses allow individuals wearing breathing apparatus entry • Hoisting system provided from the pump room to the main decks • Discharge pressure gauge for each pump located outside the pump room • Bilge pumping system with remote control and high level alarms provided • Air changed with proper frequency by the power ventilation system 	_____	_____
CS09	Test and inspect emergency shutdown station(s). <ul style="list-style-type: none"> • Minimum number of stations • Stations properly located and marked • Means provided to stop cargo pumps and close valves • Pump and valve shutdowns operate in the prescribed time • Valves may be operated manually and fail safe (closed) • Fusible elements correctly installed • Emergency shutdown controls installed at the cargo control station 	_____	_____
CS10	Inspect cargo tank vents. <ul style="list-style-type: none"> • Vent heights adequate and within CFR and IMO requirements • Vents located properly with respect to discharge areas • Drain traps installed • PV valves set to lift at proper pressure 	_____	_____
CS11	Inspect closed gauging systems. <ul style="list-style-type: none"> • High level alarms provided • High level alarms have audible and visual indicators at the cargo control station • Alarm level set within the limits proscribed by IMO or CFRs 	_____	_____
CS12	Ensure that vessel has an IGS/COW operations and equipment manual and that it has been reviewed by the Coast Guard or, after 1 JUN 82, by ABS.	_____	_____
CS13	Ensure that foreign vessel has an IGS/COW operations and equipment manual on board that meets the criteria of the regulations.	_____	_____

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS14	<p>Inspect COW piping, valves and fittings, tank washing machines, pumps and stripping system to ensure they are properly constructed, installed, and maintained.</p> <ul style="list-style-type: none"> • Dirty ballast transfer pumps and piping • Fixed piping for COW • Oily residue tank • Oil discharge/monitoring control system • Coast Guard approved plans • Permanently mounted COW machines and piping • Overpressure relief valves • Spectacle flanges • One portable drive unit for each three COW machines • Pumps of sufficient capacity to drive system • Two or more pumps capable of supplying oil to the COW • Stripping capacity in each tank 1.25 times the rate of the COW pumps • Means to isolate stripping pump from cargo tank • Pump monitoring device 	_____	_____
CS15	Inspect the vessel's letter of acceptance for the installed IGS/COW system issued by the Coast Guard or ABS.	_____	_____
CS16	Inspect the vessel's IGS/COW operations and equipment manual for entries for required inspections and details of operations conducted.	_____	_____
CS17	<p>Examine the following IGS equipment and verify that it is installed properly.</p> <ul style="list-style-type: none"> • Flue gas isolation valve working • Soot blower/flue gas interlock • Gas scrubber with water seal and 2 sources of water supply • Two blowers • Shut-off valves on suction and discharge side of blowers • The following instrumentation: <ul style="list-style-type: none"> – IG temperature – IG pressure – Oxygen content in IG • Means to calibrate instruments • Automatic gas regulatory valve • Two non-return devices • Gas main isolation valve • Deck water seal • Pressure/vacuum protection • Portable instruments to measure oxygen and flammable vapors • Piping, drains 	_____	_____

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS18	<p>Witness the IGS operational test of safety shutdowns and controls.</p> <ul style="list-style-type: none"> • Soot blower/fuel gas isolation valve interlock • Automatic gas regulatory valve <ul style="list-style-type: none"> – Upon blower failure – Upon loss of water pressure to deck water seal – Upon loss of control power – Upon low water/high water in scrubber – High IG temperature • Backflow pressure test 	_____	_____
CS19	<p>Witness IGS operational test of visual and/or audible alarms.</p> <ul style="list-style-type: none"> • Low IG pressure • Oxygen content in IG - move them 8% • Loss of water supply to deck water seal • High IG temperature • Loss of water supply to scrubber • High water level in scrubber • IG blower failure • Power failure to automatic gas regulating valve • High IG pressure 	_____	_____
CS20	<p>Witness operational test of the IG blower shut down for the following conditions:</p> <ul style="list-style-type: none"> • Loss of water supply to deck water seal • High IG temperature • Low water level/flow in scrubber • High water level in scrubber • Remote outside of space 	_____	_____
CS21	<p>Ensure proper gauging system is installed for the cargoes listed on the cargoes and restrictions list (SOE).</p>	_____	_____
CS22	<p>Inspect cargo system locations/equipment and determine if they meet the criteria specified in the regulations.</p> <ul style="list-style-type: none"> • Cargo pipe valving • Cargo pump manifolds • Cargo piping and hose connection manifolds 	_____	_____
CS23	<p>Ensure the required Cargo Information Cards are on board.</p>	_____	_____

Cargo System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
CS24	Ensure that an accurate and correctly posted cargo location plan is on board.	_____	_____
CS25	Ensure that a cargo piping plan is on board.	_____	_____
CS26	Inspect the cargo transfer hoses for condition and required markings.	_____	_____
CS27	Ensure that the person in charge of transfer operations is eligible and properly designated.	_____	_____
CS28	Ensure that incompatible cargoes are properly separated.	_____	_____
CS29	Ensure that cargo tanks' spill valves operate properly.	_____	_____

Drydock Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	LR	KI	HT	MI	ML	MS	MU	OI	TI	TV
DD01	Ensure that the vessel's entire underwater body is clean for examination.	X		X				X					X	X	X	
DD02	Determine whether structural configuration match approved plans.	X		X									X	X		
DD03	Determine whether structural configuration match plans for an SPV.							X							X	
DD04	Conduct external exam of hull, pontoons, columns, legs, mat, spud cans.												X			
DD05	During a foreign vessel examination, evaluate shell plating for damage.		X		X						X					X
DD06	Examine steel hull for damage and defects.	X		X				X					X	X	X	
DD07	Examine aluminum hull for damage and defects.							X							X	
DD08	Examine fiberglass hull for damage and defects.							X							X	
DD09	Examine wood hull for damage and defects.							X							X	
DD10	Examine critical joint areas.	X		X									X	X		
DD11	Examine draft marks.	X		X		X		X					X	X	X	
DD12	Examine load line.	X		X		X		X					X	X	X	
DD13	Examine drydock plugs for local wastage and proper fit.	X		X				X					X	X	X	
DD14	Examine sea chests and overboard discharges.			X									X	X		
DD15	Examine sea chests and overboard discharges on a SPV.							X							X	
DD16	Examine propeller for damage.			X									X	X		
DD17	Examine propeller for damage on a SPV.							X							X	
DD18	Inspect tailshaft(s) and stern bearings.			X									X	X		
DD19	Inspect tailshaft(s) and stern bearings on a SPV.							X							X	
DD20	Inspect the rudder installation.			X									X	X		
DD21	Inspect the rudder installation on a SPV.							X							X	
DD22	Examine anchor chains.	X		X									X	X		
DD23	Complete applicable structural failure reports and obtain CG-2692.	X		X									X	X		
DD24	Examine freeing ports and scuppers.	X		X		X		X					X	X	X	
DD25	Open sea valves for inspection.			X									X	X		

Drydock Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
DD26	Open sea valves for inspection on a SPV.							X							X	
DD27	Examine thruster (bow or stern) and thruster tunnel.	X		X									X	X		
DD28	Survey vessel for compliance with eligibility requirements for SEILOD.			X									X			
DD29	Conduct inspection of internal spaces and structures.	X		X									X	X		
DD30	During a foreign vessel exam, conduct inspection of internal structures.				X						X					X
DD31	Evaluate repair proposals and inspect completed repairs.	X		X									X	X		
DD32	Evaluate repair proposals and inspect completed repairs on a SPV.							X							X	

Drydock Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
DD01	Ensure that the vessel's entire underwater body is clean and exposed for examination (areas in way of blocking excluded).	_____	_____
DD02	Determine whether structural configurations match approved plans.	_____	_____
DD03	Determine whether structural configurations match approved plans for a small passenger vessel.	_____	_____
DD04	Conduct external examination of hull, pontoons, columns, legs, mat, and spud cans. <ul style="list-style-type: none"> • Sufficient cleaning of and examine for: <ul style="list-style-type: none"> – Erosion of welds – Excessive pitting, evidence of reduced thickness, set-in areas, fractures, buckling, or other damage – Wastage around overboard discharges – Wastage in the wind and water area • Sufficient cleaning for and witness diver perform: <ul style="list-style-type: none"> – Swim by – NDT of critical areas detailed in SEILOD proposal • Examine sea chests and overboard discharges for: <ul style="list-style-type: none"> – Strainers and fastenings fitted – Deterioration and cracks – Valve and spool piece connections • Examine propellers or thrusters (self-propelled or propulsion assist) • Examine load lines and draft marks (placement of marks consistent with stability letter and load line certificate and properly scribed) 	_____	_____
DD05	During a foreign vessel examination, evaluate shell plating for damage.	_____	_____
DD06	Examine steel hull for damage and defects.	_____	_____
DD07	Examine aluminum hull for damage and defects.	_____	_____
DD08	Examine fiberglass hull for damage and defects.	_____	_____
DD09	Examine wood hull for damage and defects.	_____	_____

Drydock Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
DD10	Examine critical joint areas. <ul style="list-style-type: none"> • Sheer strake • Stringer plate 	_____	_____
DD11	Examine draft marks (placement of marks consistent with stability letter and properly scribed).	_____	_____
DD12	Examine load lines (placement of marks consistent with load line certificate and properly scribed).	_____	_____
DD13	Examine drydock plugs for local wastage and fit.	_____	_____
DD14	Examine sea chests and overboard discharges. <ul style="list-style-type: none"> • Strainers and fastenings fitted • Deterioration and cracks • Valve and spool piece connections 	_____	_____
DD15	Examine sea chests and overboard discharges on a small passenger vessel.	_____	_____
DD16	Examine propeller for damage.	_____	_____
DD17	Examine propeller for damage on a small passenger vessel.	_____	_____
DD18	Inspect tailshaft(s) and stern bearings. <ul style="list-style-type: none"> • Determine tailshaft diameter • Determine when tailshaft was last pulled and when next is due • Examine shaft, NDT, keyway, liner, surfaces, and bearings • Determine bearing wear down 	_____	_____
DD19	Inspect tailshaft(s) and stern bearings on a small passenger vessel. <ul style="list-style-type: none"> • Examine visible portions of shaft • Determine bearing wear down 	_____	_____
DD20	Inspect the rudder installation. <ul style="list-style-type: none"> • Determine condition of gudgeons, pintles, and pintle locking device • Examine rudder post, rudder frame, rudder stock and stern frame for deterioration and fractures • Examine rudder carrier for deterioration and fractures 	_____	_____

Drydock Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
DD21	Inspect the rudder installation on a small passenger vessel. <ul style="list-style-type: none"> • Examine rudder post, rudder stock for deterioration and fractures • Examine rudder carrier for deterioration and fractures 	_____	_____
DD22	Examine anchor chains and determine if links are distorted or deteriorated excessively.	_____	_____
DD23	Complete applicable structural failure reports and obtain CG-2692 for reportable marine casualties.	_____	_____
DD24	Examine freeing ports and scuppers.	_____	_____
DD25	Open and conduct inspection of sea valves and bilge injection valve. <ul style="list-style-type: none"> • Stem, gate, and guides in good condition • Valves operate in power and manual modes • Valves have rising stems, or other means of showing valve open or closed • Examine condition of valve bodies, fastenings, packing glands, and spool pieces • Examine non-metallic expansion joints 	_____	_____
DD26	Open sea valves for inspection on a small passenger vessel. <ul style="list-style-type: none"> • Stem, gate, and guides in good condition • Examine condition of valve bodies, fastenings, packing glands, and spool pieces 	_____	_____
DD27	Examine thruster (bow or stern) and thruster tunnel. <ul style="list-style-type: none"> • Deterioration and cracks • Erosion of welds • Shaft seal or packing gland leakage 	_____	_____
DD28	Survey vessel for compliance with eligibility requirements for SEILOD. <ul style="list-style-type: none"> • Hull markings every 100 feet • Sea chests' gratings hinged • Identification of hull penetrations • Means to blank off sea valves 	_____	_____

Drydock Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
DD28 (cont'd.)	<ul style="list-style-type: none"> • Plans identifying location of: <ul style="list-style-type: none"> – Shell openings – Drydocking plugs – Bilge keels – Welded seams and butts – Appendages – Anodes – Rudder – Propeller – Reference points – Watertight/oiltight bulkheads 		
DD29	<p>Conduct inspection of internal spaces and structures for fractured welds, fractured structural members, coating failure, deterioration, and buckled or distorted structure.</p> <ul style="list-style-type: none"> • Deck beams, underdeck longitudinals, deck girders • Side and bottom longitudinals • Center vertical keel and keelsons • Frames, stiffeners, and brackets • Hatch covers 	_____	_____
DD30	During a foreign vessel exam, conduct inspection of internal structures.	_____	_____
DD31	<p>Evaluate repair proposals and inspect completed repairs.</p> <ul style="list-style-type: none"> • Sketch and bill of materials • Materials and welding details same as original • Inserts properly made • Fit up and joint preparation • Back gouging • Weld sequencing • Visual inspection of completed repair • Pressure test repairs (hose, air, hydro) 	_____	_____
DD32	<p>Evaluate repair proposals and inspect completed repairs on a small passenger vessel.</p> <ul style="list-style-type: none"> • Sketch and bill of materials • Materials and welding details same as original • Inserts properly made • Fit up and joint preparation • Back gouging • Weld sequencing • Visual inspection of completed repair 	_____	_____

Drydock Tasks

<u>Task</u> <u>I.D.</u> <u>Number</u>	<u>OJT</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> <u>Officer's</u> <u>Initials</u>
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- Pressure test repairs (hose, air, hydro)

Emergency Drill Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
ED01	Observe fire and boat drills.					X		X					X			
ED02	Observe drills during a control verification exam.		X													
ED03	Observe emergency drills.							X						X	X	
ED04	Review logbook and ensure entries for tests and drills have been made.					X		X					X	X	X	
ED05	Review emergency checkoff list and instructions to passengers.							X							X	

Emergency Drill Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
ED01	<p>Observe fire and boat drills.</p> <ul style="list-style-type: none"> • Maximum participation by crew accomplished • Crew members report to their proper stations • During fire drills, fire pump(s) started and fire hose(s) lead out • Individual designated as person in charge conversant with duties and procedures to be followed • Emergency equipment broken out for fire drills and designated person assigned to use gear present, properly equipped and familiar with duties • For fire drills, communications established between control center, normally the bridge, and source of emergency • Proper alarm is sounded on vessel's general alarm system • All alarm bells function properly • Visual signals in machinery spaces function properly • Escapes are clear and unobstructed • For fire drills, watertight doors secured to isolate compartments • Crew members report to stations for drills wearing PFDs, cap and shoes • For boat drills - person in charge or each boat or raft has muster list • For boat drills - communication established between bridge and boat deck • Lifeboats with fleming gear - gear is operable and crew familiar with use • Lifeboats with oars - crew is exercised • Motorized lifeboats - person in charge and engineer competent in operating the engine • Hydraulic starting system on motorized vessels capable of making six cold starts • Crew competent in readying vessel for launching (belly gripes removed, retaining pin on counter weight removed, etc.) • Lifeboat can be safely and efficiently released from falls by boat crew 	_____	_____
ED02	<p>Observe emergency drills during a control verification exam.</p> <ul style="list-style-type: none"> • Crew members report to their proper stations • Individual designated as person in charge conversant with duties and procedures to be followed • Emergency equipment broken out for fire drills and designated person assigned to use gear present, properly equipped and familiar with duties • For fire drills, communications established between control 	_____	_____

Emergency Drill Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
	<ul style="list-style-type: none"> center, normally the bridge, and source of emergency • Proper alarm is sounded on vessel's general alarm system 		
ED02 (cont'd.)	<ul style="list-style-type: none"> • All alarm bells function properly • Escapes are clear and unobstructed • For fire drills, watertight doors secured to isolate compartments • Crew members report to stations for drills wearing PFDs, cap and shoes • For boat drills - person in charge of each boat or raft has muster list • For boat drills - communication established between bridge and boat deck • Lifeboats with fleming gear - gear is operable and crew familiar with use • Lifeboats with oars - crew is exercised • Motorized lifeboats - person in charge and engineer competent in operating the engine • Crew competent in readying vessel for launching (belly gripes removed, retaining pin on counter weight removed, etc.) • Lifeboat can be safely and efficiently released from falls by boat crew • Crew communication skills with passengers 	_____	_____
ED03	Observe emergency drills. <ul style="list-style-type: none"> • Maximum participation by crew accomplished • During fire drills, fire pump(s) started and fire hose(s) lead out • All alarm bells function properly • Escapes are clear and unobstructed • Crew competent to handle emergency situations 	_____	_____
ED04	Review logbook and ensure entries related to tests and drills have been made.	_____	_____
ED05	Review emergency checkoff list and instructions to passengers.	_____	_____

Emergency Equipment Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
EE01	Inspect fireman's outfit(s).	X				X							X	X		
EE02	Examine required refrigeration masks.					X										
EE03	Inspect international shore connection.					X										
EE04	Inspect EPIRB.					X		X					X	X	X	
EE05	Test and inspect the general alarm system.					X		X					X	X		
EE06	Inspect line throwing equipment.					X							X	X		
EE07	Check that necessary cargo antidotes are on board.										X					
EE08	Examine shower and eyewash stand.										X					
EE09	Inspect pyrotechnics.	X				X		X					X	X	X	

Emergency Equipment Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
EE01	Inspect fireman's outfit(s). <ul style="list-style-type: none"> • Proper number aboard vessel • Outfits correctly stowed • Describe what constitutes a fireman's outfit • What spare equipment is required • Location(s) of fireman's outfits listed on fire safety plan • Location(s) marked in accordance with applicable regulations • Steps been taken to thwart pilfering and do they deny legitimate access to equipment • Communications system to the bridge necessary 	_____	_____
EE02	Examine required refrigeration masks.	_____	_____
EE03	Ensure the international shore connection meets 46 CFR Subchapter Q and SOLAS requirements.	_____	_____
EE04	Inspect EPIRB. <ul style="list-style-type: none"> • Right type • Operative • Stowed properly • Tested as frequently and in manner required by regulations • Battery still within date 	_____	_____
EE05	Test and inspect the general alarm system. <ul style="list-style-type: none"> • Contact makers located in accordance with applicable regulations • General alarm bells located in accordance with applicable regulations • Sound levels produced meet the minimum criteria required by regulations (is it loud enough) • Any of the alarm bells inoperative • Visual signals installed in areas of high ambient noise level • Contact makers and general alarm bells marked in accordance with regulations 	_____	_____
EE06	Inspect line-throwing equipment. <ul style="list-style-type: none"> • Required equipment provided • Equipment on board approved • Required drills with line throwing equipment conducted and logged in accordance with applicable regulations • Equipment provided within time limits for service life 	_____	_____
EE07	Ensure that necessary cargo antidotes are on board.	_____	_____
EE08	Ensure that an operable shower and eyewash stand are onboard and properly marked.	_____	_____

Emergency Equipment Tasks

<u>Task</u> <u>I.D.</u> <u>Number</u>	<u>OJT</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> <u>Officer's</u> <u>Initials</u>
EE09	Inspect pyrotechnics. <ul style="list-style-type: none"> • Proper type equipment provided for vessel being inspected • Equipment provided within time limits for service life • Equipment properly stowed • Persons in charge of lifeboats knowledgeable in use of equipment 	_____	_____

Electrical System Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
ES01	Inspect switchboards.	X	X		X			X		X	X		X	X		X
ES02	Inspect ship's service generators.	X	X		X			X		X	X		X	X		X
ES03	Inspect ship's service generators on a SPV.														X	
ES04	Inspect emergency generators.	X	X		X			X		X	X		X	X		X
ES05	Inspect battery installation.	X	X		X			X		X	X		X	X	X	X
ES06	Inspect motor controllers.	X								X			X	X		
ES07	Ensure lighting systems/fixtures are adequate and meet requirements.	X				X		X		X			X	X		
ES08	Inspect lighting systems on a SPV.														X	
ES09	Ensure receptacle outlets are properly grounded.	X				X				X			X	X	X	
ES10	Inspect distribution panels.	X				X		X		X			X	X		
ES11	Inspect distribution panels on a SPV.														X	
ES12	Survey/inspect electrical cable installation.	X				X		X		X			X	X	X	
ES13	Test power operated watertight doors from local/remote control units.					X				X			X			
ES14	Test/inspect internal communication and control systems.	X				X		X		X			X	X		
ES15	Test/inspect internal communication and control systems on a SPV.														X	
ES16	Inspect components installed in designated hazardous locations.	X				X				X			X	X		
ES17	Inspect shore power connection.							X							X	
ES18	Inspect the general alarm system emergency batteries.	X				X				X			X	X		
ES19	Perform operational test of remote ventilation shutdowns.	X				X		X		X			X	X		

Electrical System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
ES01	Inspect switchboards. <ul style="list-style-type: none"> • Nonconductive mat on deck in front of board • Nonconductive rails on board face • Nonconductive rails at the rear and sides • Dripshield on the board's top • Ground detection indicators working with no grounds indicated • Meters calibrated and working • Synchronizing controls working. • Identification for controls and meters • Area is dry and clean • Working space is provided in accordance with regulations • Overcurrent protection properly labeled 	_____	_____
ES02	Inspect ship's service generators. <ul style="list-style-type: none"> • Generators of a size or arrangement which require overspeed trips • Operational test of overspeed trips and alarms within specified limits • If the DC or AC generators operate in parallel, are the reverse power/current trips working • Guards installed around rotating or live machinery • Discoloration from overheating apparent • Filters on air intakes working to keep internals free from dust and dirt • Windings oily or dirty • Odd bearing noises present • Voltage regulated within limits specified by CFR • Working diesel low lube oil pressure trip and alarms • Working high temperature detectors and alarms for AC generators • Nameplates properly in place 	_____	_____
ES03	Inspect ship's service generators on a small passenger vessel. <ul style="list-style-type: none"> • Generator size and arrangement adequate • Operational tests satisfactory • Guards installed around rotating or live machinery • Discoloration from overheating apparent • Filters on air intakes working to keep internals free from dust and dirt • Windings oily or dirty • Odd bearing noises present • Nameplates properly in place 	_____	_____

Electrical System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
ES04	Inspect emergency generator. <ul style="list-style-type: none"> • Means of starting is provided • The following alarms/shutdowns are operable: <ul style="list-style-type: none"> – Low lube oil pressure – High cooling water temperature – Overspeed – Fixed firefighting system shutdown • The generator auto-start circuit functions and the generator can power its full-rated load within 20 seconds and accept the final emergency load within 45 seconds of loss of the normal power supply • Independent fuel supply is provided, with remote shut-off valve installed and properly marked 	_____	_____
ES05	Inspect emergency batteries. <ul style="list-style-type: none"> • Size of installation and required ventilation • Battery box is properly lined • Batteries are secure in the trays • Adequate space is provided over the cells • A means of charging is provided • Conductor overcurrent protection is provided • Ventilation/charger interlocked 	_____	_____
ES06	Inspect motor controllers. <ul style="list-style-type: none"> • Units are installed in suitable cases, or if open type, within limited access enclosure • Wearing parts are accessible • Controls are marked for each motor served • Wiring diagram is affixed to the controller enclosure • Motor controllers are drip-proof/watertight 	_____	_____
ES07	Ensure lighting systems and fixtures are adequate and meet regulations. <ul style="list-style-type: none"> • Passageways and public areas • Machinery spaces • Passenger and crew spaces • Berth lights • Exit lights • Pilot ladders • Navigation • Signaling lights • Lifeboat and liferaft embarkation stations 	_____	_____

Electrical System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
ES08	Inspect lighting systems on a small passenger vessel. <ul style="list-style-type: none"> • Portable lights • Emergency lights • Navigation lights • General lighting 	_____	_____
ES09	Ensure receptacle outlets have grounding poles and are properly grounded.	_____	_____
ES10	Inspect distribution panels. <ul style="list-style-type: none"> • Circuit directory provided • Amperage ratings of the protective devices in accordance with required circuit directory • Panelboard blanks installed, where necessary 	_____	_____
ES11	Inspect distribution panels on a small passenger vessel. <ul style="list-style-type: none"> • Amperage ratings of the protective devices in accordance with regulations • Panelboard blanks installed, where necessary 	_____	_____
ES12	Survey electrical cable installation and determine: <ul style="list-style-type: none"> • Vertical and horizontal supports properly spaced • Radius of the bends exceed CFR specifications • Portable cables used for unauthorized purposes • Acceptable materials used • Hazardous conditions exist (jury rigs, dead end cables, splices, etc.) 	_____	_____
ES13	Test power-operated watertight doors from local and remote control units.	_____	_____
ES14	Test internal communication and control systems and ensure the following systems work properly. <ul style="list-style-type: none"> • General alarms (bells and contractors) • Sound powered phones to all required stations • Engine order telegraph and wrong direction alarm • Public address system • Engineer's assistance needed alarm • Engineer's call system • Fire detection/fire alarm system • Refrigerated space alarm system 	_____	_____

Electrical System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
ES15	Test internal communication and control systems on a small passenger vessel and ensure the public address system works properly.	_____	_____
ES16	Inspect components installed in designated hazardous locations and ensure explosion proof installation. <ul style="list-style-type: none"> • Fuel purifier rooms • Paint locker • Cargo area • Pumprooms 	_____	_____
ES17	Inspect shore power connection on a small passenger vessel. <ul style="list-style-type: none"> • Means to disconnect • Watertight construction 	_____	_____
ES18	Inspect the general alarm system emergency batteries.	_____	_____
ES19	Inspect ventilation systems and perform operational test of alarms and remote ventilation shutdowns.	_____	_____

Firefighting Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
FF01	Determine amount, type, location of fire protection equipment required.	X				X		X		X			X	X	X	
FF02	Inspect CO ₂ systems.					X		X		X			X	X		
FF03	Examine fixed gas firefighting system servicing report.		X		X						X					X
FF04	Inspect CO ₂ systems on a SPV.														X	
FF05	Inspect CO ₂ systems on a barge.	X														
FF06	Inspect Halon systems.					X		X		X			X	X		
FF07	Inspect Halon systems on a SPV.														X	
FF08	Inspect semi-portable firefighting equipment.	X				X		X		X			X	X		
FF09	Inspect portable firefighting equipment.	X				X		X		X			X	X	X	
FF10	Inspect fire main and fire stations.					X		X		X			X	X		
FF11	Inspect fire main and fire stations on a SPV.														X	
FF12	Inspect fire main and fire stations during foreign vessel exam.		X		X						X					X
FF13	Witness operational test of fire detection system.	X				X		X		X			X	X		
FF14	Examine fire doors and dampers.					X		X					X	X		
FF15	Inspect fixed foam extinguishing systems.						X						X			
FF16	Inspect and operationally test sprinkler system.		X			X							X			
FF17	Review fire control and hazardous location plans.					X							X	X		
FF18	Inspect fire axes.					X							X	X		
FF19	Inspect condition of vent and duct leading from grill in galley.					X		X					X	X		
FF20	Examine fire control plan.		X			X		X					X	X		
FF21	Inspect accommodation areas for compliance with SFP requirements.					X		X					X	X		

Firefighting Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
FF01	Determine amount, type and location of fire protection equipment required. <ul style="list-style-type: none"> • By the vessel's Certificate of Inspection • By the respective regulations 	_____	_____
FF02	Inspect fixed CO ₂ systems. <ul style="list-style-type: none"> • Test sirens and time delays • Obtain servicing reports • Bottles underweight • Flexible loops serviced and tested • Diffuser heads clear • Access to CO₂ room free of obstruction • Hydrostatic test required by regulations • Instructions posted 	_____	_____
FF03	Examine fixed gas firefighting system servicing report.	_____	_____
FF04	Inspect fixed CO ₂ systems on a small passenger vessel. <ul style="list-style-type: none"> • Obtain servicing reports • Bottles underweight • Flexible loops serviced and tested • Diffuser heads clear • Hydrostatic test required by regulations • Instructions posted 	_____	_____
FF05	Inspect fixed CO ₂ systems on a barge. <ul style="list-style-type: none"> • Obtain servicing reports • Bottles underweight • Flexible loops serviced and tested • Diffuser heads clear • Access to CO₂ room free of obstruction • Hydrostatic test required by regulations • Instructions posted 	_____	_____
FF06	Inspect Halon systems. <ul style="list-style-type: none"> • Coast Guard approved • Markings and notices correct and properly posted • Controls functioning • Closure for protected spaces provided • Quantity sufficient • Vent and engine shutdowns functioning 	_____	_____

Firefighting Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
FF07	Inspect Halon systems on a small passenger vessel. <ul style="list-style-type: none"> • Coast Guard approved • Markings and notices correct and properly posted • Controls functioning • Closure for protected spaces provided • Quantity sufficient • Vent and engine shutdowns functioning 	_____	_____
FF08	Inspect semi-portable fire fighting equipment. <ul style="list-style-type: none"> • Installation approved • System serviceable • Instructions posted • Correct type and amount on hand • Markings correct 	_____	_____
FF09	Inspect portable firefighting equipment. <ul style="list-style-type: none"> • Fire extinguishers approved • Each unit serviceable • Adequate spare charges provided • Correct type and amount on hand • Distributed per fire control plan • Markings correct • Servicing properly logged 	_____	_____
FF10	Inspect fire main and fire stations. <ul style="list-style-type: none"> • Correct number of fire pump(s) provided • Fire hoses meet acceptable standards • Equipment provided at each required fire station pursuant to regulations • Requirements for hose length and size at each firestation complied with • Fire pump(s) capable of providing adequate pressure to highest and most remote fire station using pitot tube • Pressure gauge installed on discharge side of fire pump • Fire hoses serviceable after hydro testing • Valves at fire stations operable • Fire main(s), hose(s), and equipment compatible at each station • Approved nozzles and applicators provided for each fire station • Fire pump relief valve functions properly • Markings correct 	_____	_____

Firefighting Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
FF11	Inspect fire main and fire stations on a small passenger vessel. <ul style="list-style-type: none"> • Correct number of fire pump(s) provided • Fire hoses meet acceptable standards • Requirements for hose length and size complied with • Fire pump(s) capable of providing adequate pressure • Valves at fire stations operable • Acceptable nozzle provided • Markings correct 	_____	_____
FF12	Inspect fire main and fire stations during a foreign vessel exam. <ul style="list-style-type: none"> • Fire hoses meet acceptable standards • Equipment provided at each required fire station pursuant to regulations • Fire hoses serviceable after hydro testing • Valves at fire stations operable • Fire main(s), hose(s), and equipment compatible at each station • Markings correct 	_____	_____
FF13	Witness operational test of fire detection system. <ul style="list-style-type: none"> • System serviceable • All sensors free of obstructions and functioning • Alarms and indicators functioning correctly • Required instructions and diagrams provided • Markings correct 	_____	_____
FF14	Inspect and ensure proper operation of fire doors and dampers. <ul style="list-style-type: none"> • Test controls: local/remote • Remote shutdowns for machinery spaces and quarters ventilation systems • Markings correct • Fusible links 	_____	_____
FF15	Inspect fixed foam extinguishing systems. <ul style="list-style-type: none"> • Quantity of foam adequate for area protected • The rate of application meets regulatory requirements • Controls positioned properly • Instructions posted • Valves marked 	_____	_____

Firefighting Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
FF15 (cont'd.)	<ul style="list-style-type: none"> • Foam has been analyzed: <ul style="list-style-type: none"> – Specific gravity – pH – Sediment content – Water % • Monitors and piping clear and function properly • Markings correct 		
FF16	Inspect and operationally test sprinkler system.	_____	_____
FF17	Review fire control and hazardous location plans. <ul style="list-style-type: none"> • Complies with regulations • Correctly reflects the vessel as found • Indicated markings and positioning of fire extinguishing equipment correct • In required locations 	_____	_____
FF18	Inspect fire axes. <ul style="list-style-type: none"> • Correct number provided • Marked properly • Distributed adequately 	_____	_____
FF19	Inspect condition of vents and ducts leading from grill in galley for fire hazard.	_____	_____
FF20	Examine fire control plan and/or general arrangement plan to verify structural fire protection required on the vessel under inspection.	_____	_____
FF21	Determine that appropriate Class A boundaries separate accommodation and control spaces from the following: <ul style="list-style-type: none"> • Machinery spaces • Main pantry • Hazardous locations/classified areas • Storerooms 	_____	_____

Forms and Publications Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
FP01	Verify that required forms, placards and notices are posted.					X				X			X	X		
FP02	Verify that required forms, placards and notices are posted on a SPV.							X							X	
FP03	Verify that required forms, placards and notices are posted on a barge.	X														
FP04	Verify that specified warning signals and signs are in place.										X					

Forms and Publications Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
FP01	<p>Verify that the required forms, placards, and notices are posted.</p> <ul style="list-style-type: none"> • Pollution/MARPOL: <ul style="list-style-type: none"> – Placard – Waste management plan • Coast Guard forms: <ul style="list-style-type: none"> – CG-809: Station bills, drills – CG-811: Lifesaving signals and instructions – CG-841: Certificate of Inspection – CG-848: Station Bill – CG-2832: Vessel Inspection Record – CG-3372: Oil Pollution • Passenger notices • Plans posted: <ul style="list-style-type: none"> – General arrangement – Fire control plan • Rules and regulations for class of vessel • SOLAS certificates • Markings: conspicuous and legible 	_____	_____
FP02	<p>Verify that the required forms, placards, and notices are posted on a small passenger vessel.</p> <ul style="list-style-type: none"> • Pollution/MARPOL: <ul style="list-style-type: none"> – Placard – Waste management plan • Coast Guard forms: <ul style="list-style-type: none"> – CG-841: Certificate of Inspection – CG-3372: Oil Pollution • Passenger notices • SOLAS certificates • Markings: conspicuous and legible 	_____	_____
FP03	<p>Verify that the required forms, placards, and notices are posted on a barge.</p> <ul style="list-style-type: none"> • Pollution/MARPOL: <ul style="list-style-type: none"> – Placard – Waste management plan • Coast Guard forms: <ul style="list-style-type: none"> – CG-841: Certificate of Inspection – CG-3372: Oil Pollution • Markings: conspicuous and legible 	_____	_____
FP04	<p>Verify that specified warning signals and signs are in place.</p>	_____	_____

Ground Tackle Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
GT01	Verify ground tackle and related equipment is in satisfactory condition.		X	X		X							X	X		
GT02	Examine ground tackle and related equipment on a SPV.							X							X	
GT03	Examine ground tackle and related equipment on a barge.	X														
GT04	Inspect mooring system/equipment.					X								X		

Ground Tackle Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
GT01	Verify that ground tackle and related equipment is in satisfactory condition. <ul style="list-style-type: none"> • Anchors • Chain • Winch and foundations • Anchor chain stoppers • Anchor handling davits 	_____	_____
GT02	Verify that ground tackle and related equipment is in satisfactory condition on a small passenger vessel. <ul style="list-style-type: none"> • Anchors • Chain or line 	_____	_____
GT03	Verify that ground tackle and related equipment is in satisfactory condition on a barge. <ul style="list-style-type: none"> • Anchors • Chain • Winch and foundations • Anchor chain stoppers • Anchor handling davits 	_____	_____
GT04	Inspect mooring system and equipment. <ul style="list-style-type: none"> • Structurally sound bitts, cleats, fairleads and winches • Adequately sized and serviceable mooring lines and wires 	_____	_____

Initiating an Inspection Task Qualifications Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
II01	Review vessel documents and papers; state if each is valid or expired.					X							X	X		
II02	During a foreign vessel exam, review vessel documents and papers.		X		X						X					X
II03	Review vessel documents and papers on a SPV.							X							X	
II04	Review vessel documents and papers on a barge.	X														
II05	Discuss scope of inspection with owner's representative.	X		X		X		X		X			X	X	X	
II06	Obtain CG-2692 for reportable marine casualties.	X		X		X		X		X			X	X	X	
II07	Examine gas-free certificate.	X		X		X		X		X			X	X	X	
II08	Review hull gaugings and compare with original scantlings.	X		X									X	X		
II09	Review any outstanding CG-835s and ask if other deficiencies exist.	X		X		X		X		X			X	X	X	
II10	Determine if vessel has any outstanding conditions of class.		X		X						X					X
II11	Examine the vessel's existing LOC.										X					
II12	Determine if the vessel has a valid COF.										X					
II13	Determine if the vessel has any deficiencies from last LOC examination.										X					
II14	Compare the IMO COF and list of approved cargoes against the SOE.										X					
II15	Verify a cargo manifest conforming to appropriate CFRs is on board.										X					
II16	Verify that a Certificate of Inhibition is on board.										X					

Initiating an Inspection Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
II01	Review vessel documents listed in MSIS and VFLD and papers, and state if each is valid or expired.	_____	_____
II02	During a foreign vessel exam, review vessel documents listed in MSIS and VFLD and papers.	_____	_____
II03	Review vessel documents listed in MSIS and VFLD and papers on a small passenger vessel.	_____	_____
II04	Review vessel documents listed in MSIS and VFLD and papers on a barge.	_____	_____
II05	Discuss scope of inspection with owner's representative. Decide on general sequence of inspection.	_____	_____
II06	Obtain CG-2692 for reportable marine casualties/ structural failure report.	_____	_____
II07	Examine gas-free certificate issued by an NFPA-certified marine chemist for hot work and/or confined space entry. <ul style="list-style-type: none"> • Information on the gas-free certificate meet the requirements of NFPA Standard 306 and Coast Guard confined space entry/benzene exposure policy • Gas-free certificate been maintained by a designated competent person and records kept as required by OSHA regulations • Marine chemist certified by NFPA • Review benzene and confined space entry policies 	_____	_____
II08	Review hull gaugings and compare with original scantlings. Consider spot gauging by NDT or drilling.	_____	_____
II09	Review any MSIS inspection notes and outstanding deficiencies (CG-835s). Ask owner's representative if any other deficiencies exist.	_____	_____
II10	Determine if vessel has any outstanding conditions of class.	_____	_____
II11	Examine the vessel's existing LOC.	_____	_____

Initiating an Inspection Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
II12	Determine if the vessel has a valid Certificate of Fitness issued by the flag state.	_____	_____
II13	Determine if the vessel has any deficiencies from the last LOC examination.	_____	_____
II14	Compare the IMO Certificate of Fitness and list of approved cargoes against the Subchapter O Endorsement issued by the OCMI.	_____	_____
II15	Verify that a cargo manifest conforming to appropriate CFRs is on board.	_____	_____
II16	Verify that a Certificate of Inhibition is on board.	_____	_____

Liftboat Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
LB01	Examine approved operating manual.													X		
LB02	Conduct leg inspection.													X		
LB03	Examine jacking systems.													X		
LB04	Examine hydraulic systems.													X		
LB05	Test firemain suction.													X		
LB06	Inspect cranes.													X		
LB07	Examine freeboard marks.													X		
LB08	Examine test alarm installation.													X		

Liftboat Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
LB01	Examine approved operating manual. <ul style="list-style-type: none"> • Table of contents and index • Vessel description • Design limits for each operating mode • Maximum allowable deck loads • Location and use of cross-flooding fittings • Heavy weather guidance • Guidance on changing operating modes • Operational limitations for each operating mode • Leg flooding guidance • Bilge system description, diagram and operation • General arrangement diagram • Hazardous location diagram • Emergency power diagram 	_____	_____
LB02	Conduct leg inspection. <ul style="list-style-type: none"> • Check for deflection • Leg to pad connections • Hull to jacking tower connections 	_____	_____
LB03	Examine jacking systems. <ul style="list-style-type: none"> • Racks • Drive motors • Momentary switch • Drive pinions • Planetary gears • Controls 	_____	_____
LB04	Examine hydraulic systems. <ul style="list-style-type: none"> • Prime movers • Piping • Jacking system • Reliefs • Alarms • Hose fittings • Reservoirs • Fail-safe 	_____	_____
LB05	Examine firemain suction.	_____	_____

Liftboat Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
LB06	Inspect cranes. <ul style="list-style-type: none"> • Controls • Load chart • Wire rope/hook • Sheaves/blocks • Pedestal mounting • Fittings and hoses • Boom angle indicator • 5-year load test • Personnel basket condition 	_____	_____
LB07	Examine freeboard marks.	_____	_____
LB08	Examine test alarm installation. <ul style="list-style-type: none"> • Emergency power source • Test 	_____	_____

Liferaft Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
LR01	Conduct a 2-hour working pressure leakage test.								X							
LR02	Conduct a suspension test for davit-launched liferafts.								X							
LR03	Inspect liferaft equipment.								X							
LR04	Inspect inflation cylinders and hoses.								X							
LR05	Witness repacking and seal container.								X							
LR06	Conduct special 5-year inspection tests.								X							
LR07	Witness test of hydrostatic release.								X							
LR08	Complete reports and MSIS entries.								X							

Liferaft Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
LR01	Conduct a 2-hour working pressure leakage test.	_____	_____
LR02	Conduct a suspension test for davit-launched liferafts.	_____	_____
LR03	Inspect liferaft equipment.	_____	_____
LR04	Inspect inflation cylinders and hoses.	_____	_____
LR05	Witness repacking and seal container.	_____	_____
LR06	Conduct special 5-year inspection tests. <ul style="list-style-type: none"> • Inflation cylinders-hydro • Gas inflation-test • Inflation cylinder valves and seals 	_____	_____
LR07	Witness test of hydrostatic release.	_____	_____
LR08	Complete reports and MSIS entries.	_____	_____

Lifesaving Equipment Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
LS01	Determine amount/type of lifesaving equipment required.					X							X	X		
LS02	Determine amount/type of lifesaving equipment required on a barge.	X														
LS03	During foreign vessel exam, determine lifesaving equipment required.		X		X						X					X
LS04	Determine lifesaving equipment required on a SPV.							X							X	
LS05	Inspect life preservers.	X				X		X		X			X	X	X	
LS06	Inspect ring buoys.	X				X		X					X	X	X	
LS07	Inspect survival suits.					X		X		X			X	X	X	
LS08	Inspect lifeboat equipment (or survival capsule).					X							X			
LS09	Inspect lifeboat (or survival capsule) for hull structure and fittings.					X							X			
LS10	Witness lifeboat and davit launched raft weight test.					X							X			
LS11	Inspect and test lifeboat winches and associated equipment.					X							X			
LS12	Witness lifeboat operation.					X							X			
LS13	Inspect embarkation aids.					X							X			
LS14	Inspect davit structure.			X		X							X			
LS15	Inspect lifefloats and buoyant apparatus.							X							X	
LS16	Inspect inflatable liferaft installations.	X				X		X					X	X	X	
LS17	Inspect rescue boat.					X		X					X	X		
LS18	Check if vessel meets criteria for rescue platform in lieu of rescue boat.					X								X	X	

Lifesaving Equipment Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
LS01	Determine amount and type of lifesaving equipment required. <ul style="list-style-type: none"> • Certificate of Inspection • CFRs • SOLAS 	_____	_____
LS02	Determine amount and type of lifesaving equipment required on a barge. <ul style="list-style-type: none"> • Certificate of Inspection • CFRs 	_____	_____
LS03	During a foreign vessel exam, determine amount and type of lifesaving equipment required. <ul style="list-style-type: none"> • SOLAS 	_____	_____
LS04	Determine amount and type of lifesaving equipment required on a small passenger vessel. <ul style="list-style-type: none"> • Certificate of Inspection • CFRs 	_____	_____
LS05	Inspect life preservers. <ul style="list-style-type: none"> • Properly equipped with lights, whistles and reflective tape • Approved for intended service • Sufficient serviceable units aboard and properly stowed • Properly marked 	_____	_____
LS06	Inspect ring buoys. <ul style="list-style-type: none"> • Approved for intended service • Properly colored and marked • Correctly equipped with waterlights and line • Serviceable • Sufficient number of ring buoys are aboard 	_____	_____
LS07	Inspect survival suits. <ul style="list-style-type: none"> • Equipped as required • Physically serviceable • Sufficient number of units aboard and properly stowed 	_____	_____

Lifesaving Equipment Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
LS08	Inspect lifeboat equipment (or survival capsule). <ul style="list-style-type: none"> • Correct equipment and quantity on board • Equipment properly colored and marked • Equipment serviceable • Sufficient water, milk, and provisions are on board, within date limitations and still serviceable • Fuel for motorboat changed within proper time limit 	_____	_____
LS09	Inspect lifeboat (or survival capsule) for hull structure and fittings.	_____	_____
LS10	Witness lifeboat and davit launched raft weight test. <ul style="list-style-type: none"> • Weight required • Verify correct weight used • Winch brake functions properly • Davits function properly • Releasing gear functions properly 	_____	_____
LS11	Inspect and test lifeboat winches and associated equipment. <ul style="list-style-type: none"> • Properly working winches • Properly wired strip heaters used • Properly working limit switches • Properly connected emergency disconnect switch • Check condition of falls and note dates renewed/end-for ended 	_____	_____
LS12	Witness lifeboat operation. <ul style="list-style-type: none"> • Engine starts without starting aid • Engine propels boat ahead and astern efficiently • Hand propelling gear propels boat ahead and astern • Waterspray system functions properly • Lifeboat arranged properly 	_____	_____
LS13	Inspect embarkation aids. <ul style="list-style-type: none"> • Jacob's ladder provided is correct length, secured, and serviceable • Lighting provided and functions on emergency power 	_____	_____
LS14	Inspect davit structure. <ul style="list-style-type: none"> • Evidence of cracks or deterioration • Effect of defects on structure • Proper repairs and proof test required 	_____	_____

Lifesaving Equipment Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
LS15	Inspect lifefloats and buoyant apparatus. <ul style="list-style-type: none"> • Stowed in accordance with applicable regulations, using proper method of securing and float free link • Water lights and reflective tape are installed as required • Body of unit in good condition, life ropes and netting in serviceable condition • Marked in accordance with applicable regulations • Required equipment provided 	_____	_____
LS16	Inspect inflatable liferaft installations. <ul style="list-style-type: none"> • Serviced annually • Last servicing date at approved facility • Properly secured in the cradle designed for them • Hydrostatic releases serviced • Alternative means of securing meets criteria promulgated in NVIC 4-86 • Suspension test • Davit weight test • Operating instructions posted at embarkation station 	_____	_____
LS17	Inspect rescue boat. <ul style="list-style-type: none"> • Maintained in serviceable condition • Stowed in proper location as indicated on safety equipment plan. • Can be readily launched either by hand or by davit • Rescue boat is on "approved" list • Release mechanism is in service and in good condition • Required equipment in boat 	_____	_____
LS18	Determine if vessel meets criteria for use of rescue platforms in lieu of a rescue boat.	_____	_____

Machinery Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
MI01	Determine condition of the components of the steering gear assembly.					X				X			X	X		
MI02	Examine steering gear on a SPV.							X							X	
MI03	Determine if additional requirements for TV steering systems are met.						X				X					X
MI04	Inspect fuel oil service and transfer system.	X								X			X	X		
MI05	Inspect fuel oil service and transfer system on a SPV.							X							X	
MI06	Inspect bilge pumps installation, piping, and valves.	X		X		X				X			X	X		
MI07	Inspect bilge pumps installation, piping, and valves on a SPV.							X							X	
MI08	Examine refrigeration/air conditioning machinery.									X			X	X		
MI09	Examine potable water system.	X		X		X		X		X			X	X	X	
MI10	Observe operational tests of machinery.									X			X	X		
MI11	Observe operational tests of machinery on a SPV.							X							X	
MI12	Observe operational tests of machinery on a barge.	X														
MI13	Inspect the diesel installation and assembly.		X		X					X	X		X	X		X
MI14	Inspect the diesel installation and assembly on a SPV.							X							X	
MI15	Inspect the diesel installation and assembly on a barge.	X														
MI16	Inspect air starting systems.	X	X		X			X		X	X		X	X		X
MI17	Inspect hydraulic starting systems.	X	X		X			X		X	X		X	X		X
MI18	Inspect electric starting systems.	X	X		X			X		X	X		X	X	X	X
MI19	Witness operational test of main propulsion diesel automation.									X			X	X		
MI20	Witness operational test of steam propulsion automation.											X				
MI21	Observe operational test of forced draft fans and shutdowns.											X				
MI22	Internally examine UPVs requiring internal examination.	X		X				X		X			X	X	X	
MI23	Externally examine UPVs.	X		X				X		X			X	X	X	
MI24	Hydrostatically test UPVs requiring hydrostatic testing.	X		X				X		X			X	X	X	
MI25	Ensure all UPVs are properly equipped with pressure relief valves.	X		X				X		X			X	X	X	

Machinery Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
MI26	Witness pressure relief valve test.	X		X				X		X			X	X	X	
MI27	Conduct an external examination of a watertube boiler.											X				
MI28	Conduct a waterside examination of a watertube boiler.											X				
MI29	Conduct a fireside examination of a watertube boiler.											X				
MI30	Conduct a fireside and external exam of an auxiliary/heating boiler.							X				X	X	X		
MI31	Conduct a waterside examination of an auxiliary/heating boiler.							X				X	X	X		
MI32	Conduct required mountings inspections.							X				X	X	X		
MI33	Conduct a hydrostatic test of the boiler(s).							X				X	X	X		
MI34	Witness the lifting and reseating of safety valves.							X				X	X	X		
MI35	Inspect main/auxiliary condensate and sea water circulating systems.											X				
MI36	Inspect feedwater system.											X				
MI37	Inspect main steam turbine.											X				
MI38	Ensure insulation on steam piping provided to reduce personnel hazard.		X		X			X				X	X	X		
MI39	Inspect thermal fluid heater.	X										X				

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI01	Determine condition of the following components of the steering gear assembly: <ul style="list-style-type: none"> • Insides of motor controller and switch gear boxes • Mounting bolts for all equipment (vibration) attachments, links and pins • Freedom of movement and absence of any friction noises on motors and pumps • Cleanliness of space (absence of fire/personnel hazards) • Evidence of saltwater leakage through rudder post packing or vent ducts 	_____	_____
MI02	Examine steering gear on a small passenger vessel. <ul style="list-style-type: none"> • Operational tests • Hydraulic leaks • Cable condition • Leakage through rudder post 	_____	_____
MI03	Determine if additional requirements for tank vessel steering systems are met. <ul style="list-style-type: none"> • For tank vessels 10,000 GT or greater • For tank vessels 40,000 GT or greater 	_____	_____
MI04	Inspect fuel oil service and transfer system. <ul style="list-style-type: none"> • Determine condition of piping and manifolds • Determine condition of fuel oil HP and LP strainers • Ensure fuel oil pump relief pump valves discharge to suction side of fuel oil pumps • Ensure no excessive fuel oil leakage exists • Ensure that spray shields are installed on flanged joints • Witness operation of fuel oil pumps • Ensure instrumentation is operable • Externally examine fuel oil heaters • Test remote operated fuel oil system valves • Determine condition of fuel oil tank vent lines and flame screens 	_____	_____
MI05	Inspect fuel oil service and transfer system on a small passenger vessel. <ul style="list-style-type: none"> • Determine condition of piping and manifolds • Ensure no excessive fuel oil leakage exists • Test remote operated fuel oil system valves • Determine condition of fuel oil tank vent lines and flame screens 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI06	Inspect bilge pumps installation, piping, and valves. <ul style="list-style-type: none"> • System capable of pumping from any watertight compartment except ballast, oil and water tanks • Standing water drains to suction pipes • Bilge manifold has independent bilge suction control and is properly marked • Suction strainers are installed • Emergency bilge suction installed, where required • Instrumentation operable 	_____	_____
MI07	Inspect bilge pumps installation, piping, and valves on a small passenger vessel. <ul style="list-style-type: none"> • System capable of pumping from any watertight compartment • Standing water drain to suction pipes • Bilge manifold has independent bilge suction control and is properly marked • Suction strainers are installed 	_____	_____
MI08	Examine refrigeration/air conditioning machinery. <ul style="list-style-type: none"> • Rotating machinery guards • Piping • Wiring • Pressure vessels 	_____	_____
MI09	Examine potable water system. <ul style="list-style-type: none"> • Dedicated tanks; treated or coated • Tanks ventilated with insect screens installed • Water pump(s) and pressurization system operable • Pressure tank installation 	_____	_____
MI10	Determine what operational tests are required; witness tests and state if results are satisfactory. <ul style="list-style-type: none"> • Overspeed trips • Low lube oil shutdowns and alarms • High coolant temperature alarm 	_____	_____
MI11	Determine what operational tests are required; witness tests and state if results are satisfactory on a small passenger vessel. <ul style="list-style-type: none"> • Low lube oil shutdowns and alarms • High coolant temperature alarm 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI12	Determine what operational tests are required; witness tests and state if results are satisfactory on a barge. <ul style="list-style-type: none"> • Overspeed trips • Low lube oil shutdowns and alarms • High coolant temperature alarm 	_____	_____
MI13	Inspect the diesel installation and assembly, paying particular attention to the following: <ul style="list-style-type: none"> • Crankcase explosion covers • Fuel and lube oil fittings (checking for leakage) • Instrumentation • Gratings and rails around the engine • Guards over rotating machinery • Exhaust system: <ul style="list-style-type: none"> – Leaks – Lagging – Proximity of combustible material or walkways – Water cooling system – Bulkhead penetrations • Engine foundations and tank top's structural condition • Air intakes • Crankcase vents (clear) 	_____	_____
MI14	Inspect the diesel installation and assembly on a small passenger vessel, paying particular attention to the following: <ul style="list-style-type: none"> • Fuel and lube oil fittings (checking for leakage) • Instrumentation • Guards over rotating machinery • Exhaust system: <ul style="list-style-type: none"> – Leaks – Lagging – Water cooling system • Air intakes 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI15	Inspect the diesel installation and assembly on a barge, paying particular attention to the following: <ul style="list-style-type: none"> • Fuel and lube oil fittings (checking for leakage) • Instrumentation • Guards over rotating machinery • Exhaust system: <ul style="list-style-type: none"> – Leaks – Lagging – Water cooling system • Air intakes • Crankcase vents (clear) 	_____	_____
MI16	Inspect air starting systems. <ul style="list-style-type: none"> • Air receivers • Piping • Compressors 	_____	_____
MI17	Inspect hydraulic starting systems. <ul style="list-style-type: none"> • Pumps and strainers • Piping • Accumulators 	_____	_____
MI18	Inspect electrical starting systems.	_____	_____
MI19	Witness operational test of main propulsion diesel automation system. <ul style="list-style-type: none"> • Determine that the system has not been modified/jury rigged and is the same as that depicted in the procedures • Testing the automation system using the methods specified by approved procedure • Verify that automatic systems have not been bypassed or overridden by manual devices except as noted in approved test procedure • Verify proper operation of required alarms, shutdowns, controls and internal communications in accordance with the approved test procedure • Verify that bridge controls/alarms function in sync with engineroom control panel • Based on automation system testing, assess if vessel manning remains consistent with regulation/policies and determine corrective action, if necessary: <ul style="list-style-type: none"> – Temporary increase of engineroom manning – Further underway evaluation 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI20	<p>Witness operational test of steam propulsion automation.</p> <ul style="list-style-type: none"> • Determine that the system has not been modified/jury rigged and is the same as that depicted in the procedures • Testing the automation system using the methods specified by approved procedure • Verify that automatic systems have not been bypassed or overridden by manual devices except as noted in approved test procedure • Verify proper operation of required alarms, shutdowns, controls and internal communications in accordance with the approved test procedure • Verify that bridge controls/alarms function in sync with engineroom control panel 	_____	_____
MI20 (cont'd.)	<ul style="list-style-type: none"> • Based on automation system testing, assess if vessel manning remains consistent with regulation/policies and determine corrective action, if necessary: <ul style="list-style-type: none"> – Temporary increase of engineroom manning – Further underway evaluation 		
MI21	Make operational test of forced draft fans and shutdowns, both local and remote.	_____	_____
MI22	<p>Internally examine unfired pressure vessels requiring internal examination.</p> <ul style="list-style-type: none"> • Check for corrosion, scale, pitting, cracks and erosion • Examine welded connections internally 	_____	_____
MI23	<p>Externally examine unfired pressure vessels.</p> <ul style="list-style-type: none"> • Pressure gauge • Evidence of structural damage • Data plate legible • Foundations structurally sound • Attachments secure 	_____	_____
MI24	<p>Hydrostatically test unfired pressure vessels requiring hydrostatic testing.</p> <ul style="list-style-type: none"> • Determine MAWP • Observe pressure test 	_____	_____
MI25	Ensure all unfired pressure vessels are properly equipped with pressure relief valves in accordance with regulations.	_____	_____

Machinery Tasks

<u>Task</u> <u>I.D.</u> <u>Number</u>	<u>OJT</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> <u>Officer's</u> <u>Initials</u>
MI26	Witness pressure relief valve test. <ul style="list-style-type: none"> • MAWP not exceeded • Valve seats tightly • Capacity not exceeded • Correct valve type • Hand lifting device 	_____	_____
MI27	Conduct an external examination of a watertube boiler. <ul style="list-style-type: none"> • Inner casing, outer casing, wind box (bulging, distortion, etc.) • Lagging • Tank tops beneath the boiler(s) • Condition of foundation/sliding feet • Headers/handholes evidence of leakage 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI28	Conduct a waterside examination of a watertube boiler. <ul style="list-style-type: none"> • Steam drum, mud drum, and headers (waterwall, superheater) • Drum internals: <ul style="list-style-type: none"> – Dry pipe – Main and chemical feed lines – Desuperheater and control desuperheater – Surface blow – Baffle plates – Tube sheet connections/ligament – Connections and attachments – Surface conditions (scaling, pitting, corrosion, erosion, fractures, etc.) • Verify number of tubes plugged • Headers: <ul style="list-style-type: none"> – Hand hole seats – Tube connections – Welded connections – Division plates – Surface conditions 	_____	_____
MI29	Conduct a fireside examination of a watertube boiler. <ul style="list-style-type: none"> • Brick work • Corbel • Waterwall, screen, generating, and floor tubes (if fitted); (sagging, blistered, etc.) • Superheater tubes and supports • Burner • Amount of slag accumulation • Uptake and economizer • Soot blowers • Air heaters 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI30	Conduct a fireside and external examination of an auxiliary/heating boiler. <ul style="list-style-type: none"> • Furnace (distortion) • Combustion chamber (crown sheet, wrapper sheet, back sheets (distortion) • Boiler shell and heads • Stay bolts • Boiler saddles and foundations • Plating in way of mountings (wastage due to leaking valves and fittings) • Cracks in the plating due to flexing of the heads or leakage • Wastage around manhole gaskets • Note heat number and condition of fusible plugs 	_____	_____
MI31	Conduct a waterside examination of an auxiliary/heating boiler. <ul style="list-style-type: none"> • Tubes (Pitting - determine general depth and tube type) • Internal surface conditions (scaling, pitting, corrosion, erosion) 	_____	_____
MI32	Conduct required mountings inspections as follows: <ul style="list-style-type: none"> • 5-year mountings open: <ul style="list-style-type: none"> – Determine which valves to be opened – Inspect seat, disc, stem, integrity of valve body, condition of stem packing gland and gland ring bolts • 10-year mountings removed, studs examined including inspection as per mountings open and: <ul style="list-style-type: none"> – Determination of valves to be removed for inspection of pressure piping between valve and boiler. – Representative studs removed from valve flanges for inspection to determine: <ul style="list-style-type: none"> * Integrity of studs due to corrosion, neck down, deformation and thermal stress * Proper grade installed for system pressure and temperature 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI33	Conduct a hydrostatic test of the boiler(s). <ul style="list-style-type: none"> • Test conducted in conjunction with required fireside exam. • Appropriate test pressure (annual, quadrennial, repair) • Water temperature is within limits • Test pressure is achieved and held for the required time period • Blanks are installed in steam lines where necessary so a situation does not arise where a valve separates steam on one side from water on the other • Tube joints, header connect, and handhole plates tight • Main steam piping tested from boiler drum to throttle valve • All steam piping subject to main boiler pressure and greater than 3 inches nominal size is tested 	_____	_____
MI34	Witness the lifting and reseating of superheater and drum safety valves including pilot operated valves. <ul style="list-style-type: none"> • Determine MAWP • Ensure that drum safety valve is set no higher than MAWP but above normal steaming range • Ensure that the superheater safety valve is set correctly in relation to drum valves. See manufacturer's boiler book for pilot operated valve • Ensure that the "blow down" falls within 2-4% of the set pressure for each valve • Ensure that there is no simmering or chattering • Test hand relieving gear • Ensure integrity of escape piping 	_____	_____
MI35	Inspect main and auxiliary condensate and sea water circulating systems. <ul style="list-style-type: none"> • Determine condition of sea water piping, valves, and expansion joints • Determine condition of main and auxiliary condensers • Determine condition of condensate piping. • Witness operation of sea water circulating and condensate pumps 	_____	_____
MI36	Inspect feedwater system. <ul style="list-style-type: none"> • Determine condition of piping and valves • Ensure that two methods of determining boiler water levels are operable • Witness operation of feed pumps • Examine make up feed evaporator externally • Test operation of feedwater regulators if not part of automation • Externally examine feedwater headwaters 	_____	_____

Machinery Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
MI37	Inspect main steam turbine. <ul style="list-style-type: none"> • Determine condition of foundations • Governor • Throttles • Instrumentation operable • Jacking gear functions • Lube oil systems 	_____	_____
MI38	Ensure insulation is provided to reduce personnel hazard.	_____	_____
MI39	Inspect thermal fluid heater. <ul style="list-style-type: none"> • External fittings • Mountings opened or removed if deemed necessary • Hydrostatic test • Relief valve tested • Automation tested 	_____	_____

Navigation System Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
NS01	Ensure radars are operable.					X		X					X	X	X	
NS02	Inspect magnetic compass.					X		X					X	X	X	
NS03	Inspect required depth sounding/recording equipment.					X							X	X		
NS04	Examine radio direction-finding equip./elect. position fixing devices.					X							X	X		
NS05	Examine radio equipment and FCC or SOLAS documents.					X		X					X	X	X	
NS06	Inspect navigation and signal lights.					X		X					X	X		
NS07	Inspect navigation lights on a SPV.														X	
NS08	Inspect navigation and signal lights on a barge.	X														
NS09	Inspect signaling devices.					X		X					X	X		
NS10	Inspect navigation publications.					X							X	X		
NS11	Inspect navigation publications on a SPV.							X							X	
NS12	Ensure required navigational equipment is on board.					X							X	X		
NS13	Ensure required maneuvering characteristics are complete.					X										
NS14	Ensure required pre-arrival and departure tests are logged.					X								X		

Navigation System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
NS01	Ensure radars are operable. <ul style="list-style-type: none"> • ARPA operational • Correct number and type of radars aboard 	_____	_____
NS02	Inspect magnetic compass. <ul style="list-style-type: none"> • Valid deviation table • Any structural modification taken place or equipment been installed/removed near compass since last table completed 	_____	_____
NS03	Ensure required depth sounding/recording equipment is operable.	_____	_____
NS04	Ensure radio direction-finding equipment and electronic position fixing devices are provided and operable.	_____	_____
NS05	Ensure radio equipment and FCC or SOLAS documents are aboard and valid.	_____	_____
NS06	Inspect navigation and signal lights. <ul style="list-style-type: none"> • Properly functioning • Correctly placed in accordance with applicable regulations • Certificate of alternative compliance on board • Properly functioning navigation light indicator panel 	_____	_____
NS07	Inspect navigation lights on a small passenger vessel. <ul style="list-style-type: none"> • Properly functioning • Correctly placed in accordance with applicable regulations 	_____	_____
NS08	Inspect navigation and signal lights on a barge. <ul style="list-style-type: none"> • Properly functioning • Correctly placed in accordance with applicable regulations • Certificate of alternative compliance on board • Properly installed battery-operated lights 	_____	_____
NS09	Inspect signaling devices. <ul style="list-style-type: none"> • Navigation sound appliance • Distress signals • Navigation day shapes 	_____	_____
NS10	Inspect navigation publications. <ul style="list-style-type: none"> • Those required by CFR provided • Publications are current or updated where necessary • Necessary charts provided and corrected • Vessel has up-to-date notice to mariners 	_____	_____

Navigation System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
NS11	Inspect navigation publications on a small passenger vessel. <ul style="list-style-type: none"> • Those required by CFR provided • Publications are current or updated where necessary • Necessary charts provided and corrected 	_____	_____
NS12	Ensure the following navigational equipment is on board. <ul style="list-style-type: none"> • International signal flags • Whistle • Proper fog signal devices • Properly located fog gong 	_____	_____
NS13	Ensure required maneuvering characteristics are complete and pertain to vessel in question.	_____	_____
NS14	Ensure that tests required to be conducted prior to getting underway and entering port were logged in accordance with applicable regulations.	_____	_____

Nondestructive Testing Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
NT01	Approve NDT method for specific applications.	X		X				X					X	X		
NT02	Check certification of NDT technician.	X		X				X					X	X		
NT03	Witness NDT in accordance with applicable standards.	X		X				X					X	X		
NT04	Evaluate NDT results.	X		X				X					X	X		

Nondestructive Testing Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
NT01	Approve NDT method for specific applications.	_____	_____
NT02	Check the certification of the NDT technician.	_____	_____
NT03	Witness NDT in accordance with applicable standards. <ul style="list-style-type: none"> • Dye penetrant • Magnetic particle • Radiography • Ultrasonics 	_____	_____
NT04	Evaluate NDT results.	_____	_____

Pollution Prevention Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
PP01	Inspect pollution prevention equipment and documentation.					X					X		X	X		X
PP02	Inspect pollution prevention equipment on a barge.	X														
PP03	Ensure that MSD requirements are met.					X		X					X	X	X	
PP04	Conduct IOPP boarding and survey.	X				X				X			X	X		
PP05	Verify MARPOL V compliance.	X				X							X	X		
PP06	Verify MARPOL V compliance on a SPV.							X							X	
PP07	Survey pollution prevention equipment.		X		X											
PP08	Examine slop tank arrangement.						X									
PP09	Examine instruction manual for cargo and ballast systems.						X									
PP10	Examine records of discharge operations.						X									
PP11	Examine damage stability information.						X									

Pollution Prevention Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
PP01	<p>Inspect pollution prevention equipment and documentation.</p> <ul style="list-style-type: none"> • Discharge containment in place and of the proper type and size for cargo, fuel, or lube oil, as needed • Slop tank provided and located in accordance with regulations • Pump, fixed or portable piping system(s), valve(s), and controls, as the regulation apply to vessel in question, are provided to remove dirty oil and bilge slops • Pump, fixed piping, valve(s), and controls are provided for combined fuel and ballast tank(s) as needed and where specified by regulation • Oily water separator installed properly and functions correctly • Oil discharge prohibition placard is placed at the bilge and ballast manifold and/or in each machinery space • No fuel or dirty oil is carried in a prohibited oil space except as specified by regulation • Proper documentation for the person(s) assigned to vessel who deal directly with oil transfer to and from vessel • Required transfer procedures are correct, complete, and available to assigned personnel as required • Emergency shutdown system(s) function properly • Adequate communication between participants in transfer operations and sufficient lighting at critical work stations are provided where specified by regulation. • Required records for tests and inspections of oil transfer hoses and equipment and declarations of inspection are available, current and correct, where required • Scupper plugs are available for use during oil transfer operations 	_____	_____

Pollution Prevention Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
PP02	<p>Inspect pollution prevention equipment and documentation on a barge.</p> <ul style="list-style-type: none"> • Discharge containment in place and of the proper type and size for cargo, fuel, or lube oil, as needed • Oil discharge prohibition placard • No fuel or dirty oil is carried in a prohibited oil space • Proper documentation for the person(s) assigned to vessel who deal directly with oil transfer to and from vessel • Required transfer procedures are correct, complete, and available to assigned personnel as required • Emergency shutdown system(s) function properly • Adequate communication between participants in transfer operations and sufficient lighting at critical work stations provided where specified by regulation • Required records for tests and inspections of oil transfer hoses and equipment and declarations of inspection available, current, and correct, where required • Scupper plugs available for use during oil transfer operations 	_____	_____
PP03	<p>Insure that MSD requirements are met, if installed.</p> <ul style="list-style-type: none"> • Proper type installed • Device approved for use aboard inspected vessels • Adequate capacity • System is piped and wired in accordance with Subchapters F and J • Manufacturer's instructions available • Required instructions and warning placard posted 	_____	_____
PP04	<p>Conduct an IOPP boarding and survey, and verify that required equipment is on board and in proper working order.</p> <ul style="list-style-type: none"> • Segregated ballast tanks • Dedicated clean ballast tanks • Slop tanks • Monitoring equipment 	_____	_____
PP05	<p>Verify MARPOL V compliance.</p> <ul style="list-style-type: none"> • Check waste management plan • Plastics retained or incinerated • Placards posted 	_____	_____
PP06	<p>Verify MARPOL V compliance on a small passenger vessel.</p> <ul style="list-style-type: none"> • Check waste management plan • Plastics retained or incinerated • Placards posted 	_____	_____

Pollution Prevention Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
PP07	Survey pollution prevention equipment.	_____	_____
PP08	Examine slop tank arrangement.	_____	_____
PP09	Examine instruction manual for cargo and ballast systems.	_____	_____
PP10	Examine records of discharge operations.	_____	_____
PP11	Examine damage stability information.	_____	_____

Required Training Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
RT01	Complete Initial Indoctrination Lesson Plan Series (IILPS).	X		X		X		X		X			X	X	X	
RT02	Complete Inspection Department Course.	X		X		X		X		X			X	X	X	
RT03	Complete HI qualification.		X		X		X									
RT04	Complete HT qualification.										X					X
RT05	Complete MI qualification.											X				
RT06	Complete SMI Introduction Course.			X		X		X		X			X	X		
RT07	Complete SMI Hull Course.					X										
RT08	Complete SMI Machinery Course.									X						
RT09	Complete SMI OSV Course or the Hull and Machinery Courses.													X		
RT10	Complete Resident MODU Course or the Hull and Machinery Courses.												X			
RT11	Complete SMI DI Course.			X												
RT12	Complete SMI KI Course or the Hull and Machinery Courses.							X								

Required Training Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
RT01	Complete Initial Indoctrination Lesson Plan Series (IILPS).	_____	_____
RT02	Complete Inspection Department Course.	_____	_____
RT03	Complete HI qualification.	_____	_____
RT04	Complete HT qualification.	_____	_____
RT05	Complete MI qualification.	_____	_____
RT06	Complete SMI Introduction Course.	_____	_____
RT07	Complete SMI Hull Course.	_____	_____
RT08	Complete SMI Machinery Course.	_____	_____
RT09	Complete SMI OSV Course or the Hull and Machinery Courses.	_____	_____
RT10	Complete Resident MODU Course or the Hull and Machinery Courses.	_____	_____
RT11	Complete SMI DI Course.	_____	_____
RT12	Complete SMI KI Course or the Hull and Machinery Courses.	_____	_____

Stability Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
ST01	Examine stability letter and book.					X							X			
ST02	Examine stability letter.							X						X	X	
ST03	Witness a simplified stability test and complete form CG-4006.														X	

Stability Tasks

<u>Task</u> <u>I.D.</u> <u>Number</u>	<u>OJT</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> <u>Officer's</u> <u>Initials</u>
ST01	Examine stability letter and book.	_____	_____
ST02	Examine stability letter.	_____	_____
ST03	Witness a simplified stability test and complete form CG-4006.	_____	_____

Underwater Survey Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
US01	Inspect contents of diving operations manual on board.			X									X			
US02	Check designation of diving supervisor.			X									X			
US03	Check designation of person-in-charge.			X									X			
US04	Inspect diving equipment.			X									X			
US05	Ensure proper diving procedures are used in each diving mode.			X									X			
US06	Ensure SEILOD proposal contains required information.			X									X			
US07	Ensure CG accepted SEILOD proposal is on board and being followed.			X									X			
US08	Monitor diver video examination and evaluate results.			X									X			

Underwater Survey Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
US01	Inspect contents of diving operations manual on board.	_____	_____
US02	Check designation of diving supervisor.	_____	_____
US03	Check designation of person-in-charge.	_____	_____
US04	Inspect diving equipment.	_____	_____
US05	Ensure proper diving procedures are used in each diving mode.	_____	_____
US06	Ensure SEILOD proposal contains required information.	_____	_____
US07	Ensure the Coast Guard accepted SEILOD proposal is on board and being followed.	_____	_____
US08	Monitor diver video examination and evaluate results.	_____	_____

Ventilation System Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
VS01	Inspect ventilation system in pumproom(s).	X					X									
VS02	Inspect vents to voids, ballast, and portable water tanks.	X		X		X							X	X		
VS03	Examine deck openings and vents.	X		X		X							X	X		
VS04	Inspect cargo tank vents.						X									

Ventilation System Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
VS01	Inspect ventilation system in pumproom(s).	_____	_____
VS02	Inspect vents to voids, ballast, and portable water tanks. <ul style="list-style-type: none"> • Condition of vent lines • Insect screen provided and in good repair • Means of closure provided and operable 	_____	_____
VS03	Examine deck openings and vents. <ul style="list-style-type: none"> • Access covers bolted securely • Access cover gaskets in good condition • Vent closures 	_____	_____
VS04	Inspect cargo tank vents. <ul style="list-style-type: none"> • PV valves provided where required and function properly • Vent heights in compliance with regulations and international agreements • Vents open onto safe/unsafe areas • Vent header systems provided where required 	_____	_____

Watertight Integrity Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
WI01	Inspect watertight doors.	X		X		X		X		X			X	X	X	
WI02	Test power-operated watertight doors from local/remote control units.			X		X				X						
WI03	Inspect watertight bulkhead penetrations.	X		X		X				X			X	X		
WI04	Inspect watertight bulkhead penetrations on a SPV.							X							X	
WI05	Inspect remote-operated valves and controls.			X		X				X			X	X		
WI06	Inspect bilge wells and "rose boxes."			X		X				X			X	X		
WI07	Inspect hull and deck openings.	X		X		X				X			X	X		
WI08	Inspect hull and deck openings on a SPV.							X							X	
WI09	Inspect port light covers.	X		X		X		X					X	X	X	
WI10	Examine high-strength steel areas.			X									X			
WI11	Evaluate steel or aluminum hulls and all accessible spaces for damage.							X					X	X	X	
WI12	Evaluate FRP hulls and all accessible spaces for damage.							X							X	
WI13	Evaluate wood hulls and all accessible spaces for damage.							X							X	
WI14	Conduct a simplified subdivision calculation; complete form CG-4005.														X	

Watertight Integrity Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
WI01	Inspect watertight doors. <ul style="list-style-type: none"> • Knife edges intact and in good repair; no excessive paint buildup • Gasket material installed in channel is in good condition and not painted • Knife edges and channel meet as designed when door closed • Hinges and hinge bolts in good condition; no sagging of door due to rounded out hinges or worn hinge bolts • Dogs are all operable; grease fittings still usable • Dogging wedges not excessively worn and fit up satisfactory • Quick-closing gear operable and adequate closure achieved • Any port lights installed in watertight doors use wire mesh reinforced glass • Dogging wrench provided in vicinity of watertight door(s) 	_____	_____
WI02	Test power-operated watertight doors from local and remote control units.	_____	_____
WI03	Inspect watertight bulkhead penetrations. <ul style="list-style-type: none"> • Penetrations properly sealed to maintain watertight integrity through use of devices such as stuffing tubes • Sealant used, if stuffing tubes are employed, is non-flammable product designed for such use and is approved 	_____	_____
WI04	Inspect watertight bulkhead penetrations on a small passenger vessel. <ul style="list-style-type: none"> • Penetrations properly sealed to maintain watertight integrity through use of devices such as stuffing tubes 	_____	_____
WI05	Inspect remote-operated valves and controls. <ul style="list-style-type: none"> • Each valve identified as to function either by tag affixed to handle or by independent means • Each valve adequately lubricated and freely operated • Reach rods and other manual remote control mechanisms function properly • Each power-operated valve can be operated from control stations • An adequate means of control is provided to secure valves on fuel and lube oil lines to prevent pollution incident 	_____	_____
WI06	Inspect bilge wells and "rose boxes." <ul style="list-style-type: none"> • They are clear of debris; strainer plates in place • Bilge pumping system(s) function adequately (demonstrate ability of system to take suction from each bilge well) • Bilge alarms function properly 	_____	_____

Watertight Integrity Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
WI07	Inspect hull and deck openings. <ul style="list-style-type: none"> • Dogs, gaskets and knife edges maintained as previously described for watertight doors, on any hull or deck openings • Cargo hatches structurally sound and watertight; hatches observed in secured position to verify • Sideports and Ro-Ro Ramps, if applicable, structurally sound and watertight 	_____	_____
WI08	Inspect hull and deck openings on a small passenger vessel. <ul style="list-style-type: none"> • Dogs, gaskets and knife edges are maintained as previously described for watertight doors, on any hull or deck openings 	_____	_____
WI09	Inspect port light covers. <ul style="list-style-type: none"> • Port lights at the main deck level have a cover installed • Dogs free on each shutter • Shutters restricted in their movement from stowed-to-closed position 	_____	_____
WI10	Examine high-strength steel areas.	_____	_____
WI11	Evaluate steel or aluminum hulls and all accessible spaces for damage. <ul style="list-style-type: none"> • Wastage • Fractures • Upsets of shell plate • Deformed framing or stiffeners • Evaluate proposed repairs • Unauthorized/improper repairs or modifications 	_____	_____
WI12	Evaluate fiberglass hulls and all accessible spaces for damage. <ul style="list-style-type: none"> • Loose or wasted fasteners • Mechanical damage • Blistering • Delaminations • Evaluate proposed repairs • Unauthorized/improper repairs or modifications 	_____	_____

Watertight Integrity Tasks

<u>Task</u> <u>I.D.</u> <u>Number</u>	<u>OJT</u> <u>Task</u>	<u>Date</u> <u>Completed</u>	<u>Verifying</u> <u>Officer's</u> <u>Initials</u>
WI13	Evaluate wood hulls and all accessible spaces for damage. <ul style="list-style-type: none"> • Loose or wasted fasteners/keel bolts • Mechanical damage • Marine borer damage • Loose caulking/sprung planks • Evaluate proposed repairs • Rot/lack of ventilation in closed spaces • Unauthorized/improper repairs or modifications 	_____	_____
WI14	Conduct a simplified subdivision calculation and complete form CG-4005.	_____	_____

Welding Repair Task Qualification Matrix

TSK #	TASK	BI	CV	DI	FV	HI	HT	KI	LR	MI	ML	MS	MU	OI	TI	TV
WR01	Evaluate welding repair proposal.	X		X		X				X			X	X		
WR02	Complete initial visual inspection of weld repair.	X		X		X				X			X	X		
WR03	Complete intermediate visual inspection of weld repair.	X		X		X				X			X	X		
WR04	Complete final visual inspection of weld repair.	X		X		X				X			X	X		
WR05	Witness pressure testing of welded repairs.	X		X		X				X			X	X		
WR06	Examine approved WPS and WPQ.							X		X			X	X		

Welding Repair Tasks

<u>Task I.D. Number</u>	<u>OJT Task</u>	<u>Date Completed</u>	<u>Verifying Officer's Initials</u>
WR01	Evaluate welding repair proposal. <ul style="list-style-type: none"> • Plan or sketch submitted with bill of materials • Configuration of repair acceptable • Material specification same as existing or equivalent • Method of joining acceptable 	_____	_____
WR02	Complete initial visual inspection of weld repair. <ul style="list-style-type: none"> • Examine fit up in accordance with approved weld procedures • Examine joint preparation in accordance with approved weld procedures • Verify materials (base, filler, gas) in accordance with approved weld procedures • Verify proper preheat temperature/time in accordance with approved weld procedures • Evaluate weather conditions • Check welding equipment in accordance with approved weld procedures 	_____	_____
WR03	Complete intermediate visual inspection of weld repair. <ul style="list-style-type: none"> • Check back gouging for full penetration weld • Check proper cleaning between weld passes • Check interpass temperatures in accordance with approved procedures • Verify that proper weld sequencing is followed • Evaluate weather conditions 	_____	_____
WR04	Complete final visual inspection of weld repair. <ul style="list-style-type: none"> • Perform dry search to ensure welding complete and followed weld details • Perform surface inspection of welds for defects • Verify proper postheat temperature/time in accordance with approved weld procedures 	_____	_____
WR05	Witness pressure testing of welded repairs. <ul style="list-style-type: none"> • Witness hose testing • Witness air testing • Witness hydrostatic testing 	_____	_____
WR06	Examine approved Weld Procedure Specification and Welder Performance Qualifications.	_____	_____